## WHAT IS CLAIMED IS:

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A\method for inter-node communication, comprising the steps of:

dividing a plurality of unencoded signals into groups at a first node, wherein each group has a number of unencoded signals;

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transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly an equal number of logic 1's and logic 0's; and

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transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

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2. The method of claim 1 wherein each group of unencoded signals includes an equal number of signals.

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The method of claim 1 wherein the transforming step includes the step of transforming the groups of unencoded signals into groups of encoded signals having an equal number of logic 1's and logic 0's.

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4. The method of claim 1 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of six unencoded signals into a group of eight encoded signals.

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The method of claim 1 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of four unencoded signals into a group of six encoded signals.

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 6. The method of claim 1 further comprising the step of selecting an encoding scheme prior to performing the step of dividing a plurality of unencoded signals into groups.

7. The method of claim 6 wherein the encoding scheme transforms a group of unencoded signals to encoded signals such that a difference between a total number of unencoded data values and a total number of encoded data values is a predetermined fraction of the total number of unencoded data values.

8. The method of claim 1 further comprising the step of transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

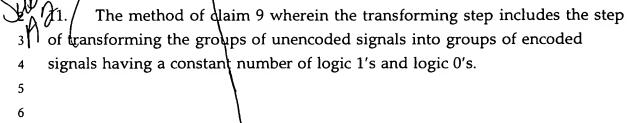
A method for inter-node communication, comprising the steps of:

dividing a plurality of unencoded signals into groups at a first node, wherein each group has a number of unencoded signals;

transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly a constant number of logic 1's and logic 0's; and

transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

10. The method of claim 9 wherein each group of unencoded signals includes an equal number of signals.



12. The method of claim 9 further comprising the step of selecting an encoding scheme prior to performing the step of dividing a plurality of unencoded signals into groups.

13. The method of claim 12 wherein the encoding scheme transforms a group of unencoded signals to encoded signals such that a difference between a total number of unencoded data values and a total number of encoded data values is a predetermined fraction of the total number of unencoded data

 values.

14. The method of claim 9 further comprising the step of transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

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